DOCUMENT RESUME

ED 126 308 CE 007 437

AUTHOR Peters, Richard O.
TITLE A Strategy to Affect Student Career Awareness of Vocational Occupations.
INSTITUTION New Hampshire Supervisory Union 58, Groveton.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
REPORT NO VT-102-965
NOTE 12p.

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS Career Awareness; *Career Education; Elementary Secondary Education; *Program Descriptions; *Program Evaluation; Rural Education; Rural Schools; Statistical Analysis

ABSTRACT

This report describes a K-12 career education project in the New Hampshire School Supervisory Union 58 to increase student awareness regarding a wide variety of occupations, to assist students in making intelligent and informed career decisions, and to provide exploration of diverse vocational occupations and on-the-job training effecting skills development. The components of the rural schools oriented program briefly described are awareness lessons, career counseling, career seminars, field trips, guest speakers, minicourses, training site placement seminars, and training sites. The components of the inservice program for instructional staff are also described: workshops, minishops, skillshops, field trips and tours, guest speakers, and visitations. The pretesting and posttesting procedures are described with statistical analysis and presentation of the results. At the 5th and 6th grade levels there was significant growth in level of occupational awareness throughout the Union. For the other levels and among the individual schools tested, results varied. (NJ)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED126308

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

A STRATEGY TO AFFECT STUDENT CAREER AWARENESS OF VOCATIONAL OCCUPATIONS

Richard O. Peters, Ed. D.

Beginning in July 1973, the National Institute of Education funded a rural schools oriented Experimental Schools Program (ESP) project in New Hampshire School Supervisory Union 58. Union 58 incorporates the communities of Northumberland, Stark, and Stratford with a total Kindergarten through grade twelve student population of 1,104 (1975-1976 school year).

As stated in the project's three year plan, the purpose of the development of a comprehensive (Kindergarten through grade twelve) career education program was to provide continuous, integrated, and sequential instructional activities for students; namely, student awareness regarding a wide variety of occupations, student exploration of diverse vocational occupations, assisting students in making intelligent and informative career decisions, and to provide students with on-the-job training which effects skills development.

In accordance with Super's[1] stages of growth theory, the Union 58 ESP project's career awareness program provides for dominant aspects at given stages:

---

[1] Reference to D. E. Super, "A Theory of Vocational Development" in Career Awareness Inventory: Teacher's Manual pg. 11.

CE007437

1. awareness lessons. Kindergarten through grade twelve instructional lessons written by classroom teachers for purposes of affecting and enriching student awareness of occupations in the world of work.

2. career counseling. Guidance personnel conducting both a series of group career counseling meetings to assist them in decision-making at grades 7-12.

3. career seminars. Guest speakers appeared before groups of students in grades 7-12 to discuss their occupations and related education/training needs. Seminars were organized around several of the world of work clusters - as developed by the U.S. Office of Education.

4. field trips. Groups of students (K-12) were taken out into the community - as part of instructional lessons - to both observe and interact with area resources.

5. guest speakers. Community resource people appeared in K-12 classrooms for purposes of meeting with students and to discuss their jobs.

6. mini courses. Elective skills development courses offered to students in grades 10-12. Among the several ten week courses offered were building trades, small engine repair, and surveying.

VT 102 965

7. training site placement seminars. Prior to being placed at area training sites, students (grades 10-12) attended pre-placement counseling sessions. Seminar consultants discussed work related attitudes, behavior, and decision-making with students.

   "Along with the knowledge of self and the world of work, youth needs help in decision making skills. Decision making must be seen as equal and complimentary when integrated with one's values and a knowledge of the world of work in presenting an education program with emphasis on assisting individuals."[2]

8. training sites. Students were placed at community resource sites for purposes of pre-service training and skills development. Prior to student placement at a given training site of his/her choice, a series of instructional objectives were developed in conjunction with the site supervisor. Both the student(s) and the site supervisor(s) were periodically interviewed and the student(s) kept weekly records of site activities and training. Collectively, the site objectives, the periodic interviews, and the weekly student reports provided the basis for evaluating the student's learning experience and the educational value of the site(s).

In-Service Training

In order to develop and implement a career occupations awareness program, there was a need to prepare the instructional

---

[2] Educator's Handbook for Secondary Career Guides Programs - New Hampshire Guidelines, pg. 26.

staff, i.e., classroom teachers and support personnel, and involve them in the process of change.

Several training strategies were employed. They included:

1. workshops. All-day and half-day release time sessions which provided opportunities for skills development materials construction, 'how-to-do-it' techniques, and program orientation, as well as lesson development and curriculum writing.

2. minishops. Two hour-or-less long enrichment activities concerned with materials introduction and 'how-to-do-it' demonstrations. They were usually scheduled after school, on Saturdays, or during school vacations.

3. skillshops. Scheduled as follow-ups to workshops, skillshops were geared toward skills enrichment and were usually scheduled for short periods of time either after school, on Saturdays, or during school vacations.

4. field trips and tours. Opportunities for teachers to explore the natural, social and human resources within their communities for purposes of awareness, orientation, and incorporation into the instructional process - to benefit student learning.

5. guest speakers. Community resource people who instructed teachers in skills application to their jobs and who developed teacher awareness of their occupations and related community resources/sites.

6. visitations. Professional visits to other teachers/ classrooms within and outside Union 58 - for purposes of awareness of - and orientation to instructional techniques, materials, programs and learning activities/ experiences.

Career Testing in Union 58

"In order to better meet the career needs of students in Union 58, it is first necessary to determine at what level these students are performing. For the purposes of the ESP project career testing program, four (4) areas have been identified as being of importance in the student career decision making process. These areas are:

1. awareness of occupations. Students should be aware of a wide variety of occupations in order to have a variety of choices available in their career decision making process.

2. attitudes toward work. Without a positive attitude toward the world of work the student's career decision making process will be hindered.

3. career choice competencies. These competencies deal with the student's ability to make realistic career choices.

4. aptitudes for work. Students should be aware of their career aptitudes and should use this information in their career decision making process."[3]

The Cornell Career Awareness Inventory (CAI) was selected for use to provide information concerning the occupational awareness level of students in Union 58. The CTB/McGraw-Hill Career Maturity Inventory (CMI) was selected to assess student attitudes

---

[3] Union 58 Career Testing Program, pg. 1.

toward the world of work as well as to measure student career choice competencies.

During the course of the 1974-1975 school year, Union 58 students in grades 5-8 were tested with both the CAI and CMI instruments. As a result of the CAI testing in March 1975, item analysis indicated a great deal of consistency in wrong response selection of the students tested. Among the occupations that student had trouble recognizing were: accountant, architect, bookkeeper, dispatcher, economist, journalist, lawyer, pharmacist, and salesperson.

Thus, a short term longitudinal research study was designed. The March 1975 testing in grades 5-8 (n=346) would constitute the pre-test and during the course of the 1975-1976 school year these same students would be tested again; the post-test. Between the March 1975 pre-testing and the 1975-1976 school year post-testing (January 1976), students would become involved with aspects of the K-12 career awareness program. These intervening activities included: awareness lessons, field trips, guest speakers, Bread and Butterflies films, and mini courses. (Diagram I)

UNION 58 (Grades 5-8) OVERALL (Diagram I)

1974-1975	1975-1976
Career Lessons (19)	Career Lessons (21)
Field Trips (8)	Field Trips (3)
Guest Speakers (3)	Guest Speakers (2)
Bread & Butterflies (7) films	Bread & Butterflies (3) films
Workshops (1)	Workshops (0)
Mini Courses (1)	Mini Courses (0)

In January 1976, the Cornell Career Awareness Inventory (CAI) post-test was administered to Union 58 students. Groups of students were tested by classroom teachers, a guidance counselor, and the ESP project's Level I Evaluator. A total of 369 students were involved in this activity. Only the pre-test and post-test scores for those students whose previously recorded pre-test data were on file were compared for purpose of this study. As a result, 232 students in grades 5-7 (1974-1975 school year) comprised the target population data analysis group.[4]

Analysis of Data

Inferential statistical process were employed to analyze data. The 't' test was used to determine the significance of difference(s) between pre- and post-test means at the .05 level of confidence. The test/retest correlation coefficient, as well as the standard deviation (σ) and standard error of means, was calculated.

Results

As a result of the CAI pre-post testing in Union 58, data analysis indicated that:

1. at the 5th-6th grade level, significant differences existed between pre-post test mean scores at the .05 level of confidence for all three testing sites; Northumberland,

---

[4] The 1974-1975 school year 5th-7th graders were 1975-1976 school year 6th-8th graders respectively. The 1975-1976 5th graders were not tested in 1974-1975 as 4th graders and 1974-1975's 8th graders were not tested in January 1976.

Stark, and Stratford. The March 1975 pre-test mean for Northumberland was 89.49 and the January 1976 post-test mean was 93.34, resulting in a pre-post test mean difference of + 3.85. Pre-post mean scores for Stark were 69.33 and 87.77, with a mean difference of + 18.44, while the pre-ost test mean scores for Stratford were 71.44 and 84.44, resulting in a mean score difference of + 13.00.

2. at the 6th-7th grade level, there was no significant difference between pre-post test mean scores at two testing sites; Stark and Stratford. There was significant difference between pre-post test mean scores for Northumberland students. The pre-post test means were 83.75 and 89.43 - with a mean difference of + 5.68.

3. in the 7th-8th grades, significant differences existed between pre-post test mean scores at all testing sites. While the Northumberland pre-post test means were 89.49 and 93.34, with a mean score difference of +3.85, the Stratford pre-post test means were 78.87 and 91.93, with a mean score difference of + 13.06.

4. union wide, there was significant difference between pre-post test mean scores for grades 5-8; 84.50 and 91.09 respectively, with a mean score difference of + 6.59.

UNION 5/6 (Composite)

	Mean	Difference	Standard Deviation	Standard Error	Correlation
1974-1975	79.532	+ 11.312	14.652	1.6697	.763
1975-1976	90.844		11.364	1.2950	

UNION 6/7 (Composite)

	Mean	Difference	Standard Deviation	Standard Error	Correlation
1974-1975	85.366	+ 3.719	14.273	1.6939	.688
1975-1976	89.085		13.247	1.5721	

UNION 7/8 (Composite)

	Mean	Difference	Standard Deviation	Standard Error	Correlation
1974-1975	87.253	+ 5.843	13.403	1.4711	.758
1975-1976	93.096		13.716	1.5056	

Conclusions

At the 5th-6th grade level, there was significant growth in student's level(s) of occupational awareness throughout the union - at all testing sites. This factor of significance was determined at the .01 level of confidence as well as at the .05 level. The reason for student growth can possibly be attributed to intervening activities and/or new teachers.

In Stark and Stratford, there was no significant growth in the level of occupational awareness among 6th-7th grade students. There was significant awareness growth among 6th-7th grade students at Northumberland (at the .05 level of confidence).

There were no intervening career education activities[5] at the 7th grade level from September 1975 to January 1976. The reason for awareness growth among Northumberland elementary school students (6th graders during the 1974-1975 school year) can possibly be attributed to the large number of intervening activities with which they were involved from March to June 1975.

Since July 1973, the Union 58 ESP project has been involved in the development, implementation, and evaluation of a comprehensive career education program which aims at affecting student awareness growth regarding world of work career occupations. At the local school level, teachers have developed approximately 100 concept and cluster lessons, students have been exposed to the character of their communities and to the occupation opportunities within, community resource sites and people have been employed as community classrooms and as a community instructional staff, and students have been placed in mini courses and at training sites for purposes of vocational skills developments and application.

---

[5] When using the terms 'intervening activities' or 'intervening treatment' in the context of this study, reference is made to only project related activities and experiences, e.g., lessons, field trips, guest speakers, Bread & Butterflies films.

BIBLIOGRAPHY

Career Awareness Inventory: Teacher's Manual, Scholastic Testing Service, Bensenville, Illinios, 1974.

Educator's Handbook for Secondary Career Guidance Programs - New Hampshire Guidelines, NH Research Coordinating Unit, Concord, New Hampshire, 1975.

Union 58 Career Testing Program, Experimental Schools Program, New Hampshire School Supervisory Union 58, Northumberland, New Hampshire, 1974.